

## Autumn 2018./2019.

SCHOOL	
TEAM NUMBER	
CATEGORY	D, 3rd year
COMMISSIONER	

	Student's name and surname	Year	Mentor's name and surname
1.			
2.			

## **ANSWERS:**

3RD YEAR						
3.1.	3.6.	3.	13.			
3.2.	3.7.	3.	14.			
3.3.	3.8.	3.	15.			
	3.9.	3.	16.			
		3.	17.			
		3.	18.			
		3.	19.			
		3.	20.			



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CORRECT ANSWER: 10 pts ANSWER "E": 0 pts FALSE ANSWER: -2 pts

3.1. Evaluate  $2 + 2 \cdot 2 : 2 \cdot 2$ 

A.	В.	C.	D.	Ε.	We don't want to
6	3	2	$\Delta$		answer
	3	_	Т		

3.2. Increase the sum of 35 and 12 by their difference. What is the result?

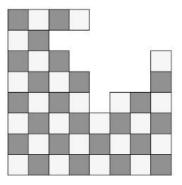
<b>A.</b>	В.	C.	D.	<b>E.</b> We don't want to
94	0	70	24	answer
	o o	, 0	24	

3.3. For two lines that don't have any common point we say that they are:

A.	B.	C.	D.	E.	We don't want to
perpendicular	parallel	same	Can't be determined		answer

CORRECT ANSWER: 20 pts ANSWER "E": 0 pts FALSE ANSWER: –4 pts

3.6. John used black and white tiles to make a chessboard. His little brother Charles took several tiles (look at the picture!). How many black tiles did Charles take?



A.	В.	C.	D.	<b>E</b> . We don't want to
18	9	8	7	answer
		· ·	,	

3.7. The Croatian football team landed at the Zagreb Airport at 3:31 pm. They arrived at the main square at 9:25 pm. How many minutes did they travel from the airport to the main square?

A.	В.	C.	D.	E.	We don't want to
Less than 300 min	More than 400 min	354 min	366 min		answer

3.8. How many two-digit numbers are there, so that sum of their digits is equal to the tens digit?

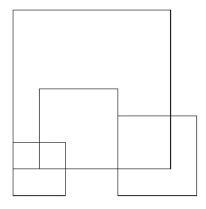
A.	B.	C.	D.	E.	We don't want to
10	9	8	Can't be determined		answer

3.9. Elisabeth is drawing symbols in the following sequence  $\clubsuit \spadesuit \spadesuit \clubsuit \clubsuit \clubsuit \cdots$  What will be the 17th symbol?

A.	B.	C.	D.	E. We don't want to
<b>*</b>	<b>*</b>	<b>^</b>	•	answer

CORRECT ANSWER: 30 pts ANSWER "E": 0 pts FALSE ANSWER: -6 pts

3.13. How many quadrilaterals are there in the following picture?



A.	B.	C.	D.	E.	We don't want to
6	7	8	9		answer

3.14. Domino tiles are small rectangular tiles split into two squares. These squares can be empty or have one to six dots. How many different domino tiles exist?



A.	B.	C.	D.	<b>E</b> . We don't want to
49	36	18	28	answer

3.15. Eve has 16 colored papers. She cuts some of these papers into three parts. After that, Eve has 26 papers. How many papers did she cut?

A.	B.	C.	D.	E.	We don't want to
5	10	6	Can't be determined		answer

3.16. Allan tossed a dice (each side has one to six dots), and he wrote a result. In five tosses, the sum of all results was 28. How many times did the dice show the number 3?

A.	B.	C.	D.	E.	We don't want to
0	1	2	Can't be determined		answer

3.17. Calculate the sum of all odd three-digit numbers with different digits (digits can't be repeated) written using digits 2, 3, and 5.

A.	В.	C.	D.	E.	We don't want to
2220	1688	1336	1101		answer

3.18. Susan lives on the farm, and she has many animals: 4 cows, 12 hens, 7 ducks, 5 pigs, 2 dogs, 3 cats, 2 fish, and 2 hamsters. How many legs do her animals have in total?

<b>A</b> .	B.	C.	D.	E.	We don't want to
98	102	100	96		answer

3.19. If  $\bigstar + \bigstar + 5 + \bigstar + 2 + \bigstar = \bigstar + \bigstar + 10 + \bigstar$ , calculate  $\bigstar$ ?

A.	<b>B</b> .	C.	D.	E.	We don't want to
3	4	6	Can't be determined		answer

3.20. Anna has three rectangular tiles in different colors: blue , yellow and red and red . How many different ways are there to place these tiles in order to cover a board with two rows and three columns?



A.	B.	C.	D.	E.	We don't want to
20	18	12	6		answer